CONTENTS

Volume 25 Number 1 February 1990

1 Degradation of polysaccharides by immobilized depolymerizing enzymes *P. L. Turecek, F. Pittner & F. Birkner*

9 Changes in the electrical conductivity of foods during ohmic heating *K. Halden, A. A. P. de Alwis & P. J. Fryer*

26 Measurement of dielectric properties of herring flesh using transmission time domain spectroscopy *M. Kent*

39 An improved high-pressure homogenizer for making fine emulsions on a small scale *I. Burgaud, E. Dickinson & P. V. Nelson*

47 Effect of pretreatment with salt and sucrose on the quality and stability of dehydrated cauliflower *K. S. Jayaraman, D. K. Das Gupta & N. Babu Rao*

61 Nutrient loss in the hot water blanching of potatoes *P. Rice, J. D. Selman & R. K. Abdul-Rezzak*

66 Chemical and nutritional quality of Indonesian dried–salted mackerel (*Rastrelliger kanagurta*) *F. W. Maruf, D. A. Ledward, R. J. Neale & R. G. Poulter*

78 Changes in volatile bases and trimethylamine oxide during the canning of albacore (*Thunnus alalunga*) *J. M. Gallardo, R. I. Perez-Martin, J. M. Franco, S. Aubourg & C. G. Sotelo*

82 Amino acid composition of whole mackerel (*Scomber scombrus*) stored anaerobically at 20°C and at 2°C *H. Haaland, E. Arnesen & L. R. Njaa*

88 A model for the hot water decontamination of sides of beef in a novel cabinet based on laboratory data *K. R. Davey*

98 A comparison of modified atmosphere and vacuum skin packing for the storage of red meats *A. A. Taylor, N. F. Down & B. G. Shaw*

110 Effects of controlled atmospheres on microbial spoilage, electrolyte leakage and sugar content of fresh 'ready-to-use' grated carrots *F. Carlin, C. Nguyen-The, Y. Chambroy & Maryse Reich*

120 Book reviews

Volume 25 Number 2 April 1990

129 Rheological behaviour of wheat flour dough in twin-screw extrusion cooking *S. M. Wang, J. M. Bouvier & M. Gelus*

140 Water desorption isotherms of two varieties of sweet potato *L. M. Diamante & P. A. Munro*

148 Lethality calculation for thermal processes with different heating and cooling rates *Q. T. Pham*

157 Extraction of ginger rhizome: kinetic studies with dichloromethane, ethanol, 2-propanol and an acetone–water mixture *M. Spiro, M. Kandiah & W. Price*

168 Catalysis of the reaction between sorbic acid and thiols by surfactants
B. L. Wedzicha & A. Zeb

180 Purification and preliminary characterization of five serine proteinases produced by *Brevibacterium linens* *K. Hayashi, A. J. Cliffe & B. A. Law*

188 Partial characterization of the *in situ* activity of pectinesterase in Bramley apple *Karen King*

198 Detoxification of cassava during gari preparation *A. T. Vasconcelos, D. R. Twiddy, A. Westby & P. J. A. Reilly*

204 Acceptability of crackers ('Keropok') with fish protein hydrolysate *S. Y. Yu & L. K. Tan*

209 Evaluation of cooking time and quality of seven diverse cowpea (*Vigna unguiculata* (L.) Walp.) varieties *B. E. deMooy & C. J. deMooy*

213 Carotenoid composition and vitamin A value of some native Brazilian green leafy vegetables *Adriana Z. Mercadante & Delia B. Rodriguez-Amaya*

220 Evaluation of a general purpose abrasive mill for pearling of coarse cereals and dehusking of pulses *K. M. Sahay*

Short Communication

226 Tensile and compressive strengths of two horticultural packaging materials: cane and palm frond *A. S. Adegoroye, D. E. Eniayeju & O. O. Ajibola*

230 Letter to the Editor

233 Book reviews

Volume 25 Number 3 June 1990

247 Review: The sensory quality of foods produced by conventional and enhanced cook–chill methods *L. H. Mason, I. J. Church, D. A. Ledward & A. L. Parsons*

260 Mechanisms of gelation of sardine proteins: influence of thermal processing and of various additives on the texture and protein solubility of kamaboko gels
H. Roussel & J. C. Cheftel

281 The properties of surimi and kamaboko gels from nine British species of fish
R. J. Hastings, J. N. Keay & K. W. Young

295 Rancidity and lipid oxidation of dried–salted sardines
Z. Lubis & K. A. Buckle

304 Changes in the composition of the fatty acids and aldehydes of meat lipids after heating *A. C. Fogerty, F. B. Whitfield, D. Svoronos & G. L. Ford*

313 Analysis of indole and skatole in porcine gut contents
C. K. Wilkins

318 Diffusion of carbon dioxide in tomato fruits during cold storage in modified atmosphere *N. Bertola, A. Chaves & N. E. Zaritzky*

328 Extraction of ginger rhizome: kinetic studies with supercritical carbon dioxide *M. Kandiah & M. Spiro*

339 Effect of batch extraction conditions on extraction of polyphenols from rooibos tea (*Aspalathus linearis*) *E. Joubert*

344 Chemical and sensory analyses of spray- and freeze-dried extracts of rooibos tea (*Aspalathus linearis*) *E. Joubert*

350 Heat of sorption of water in dried fruits *E. Tsami, Z. B. Maroulis, D. Marinos-Kouris & G. D. Saravacos*

360 Equilibrium moisture content, BET monolayer moisture and crispness of extruded rice-legume snacks *G. S. Chauhan & G. S. Bains*

364 Book reviews

Volume 25 Number 4 August 1990

377 Coagulation and washing conditions for acid casein production from skim milk powder *J. Fichtali, F. R. van de Voort & C. J. Toupin*

389 Microbiological and physicochemical changes in minced meats under carbon dioxide, nitrogen or air at 3°C *G. J. Nychas & J. S. Arkoudelos*

399 High resolution ^{13}C NMR spectroscopy of rendered animal fats: degree of saturation of fatty acid chains and position on glycerol *Madeleine Bonnet, C. Denoyer & J. P. Renou*

409 Salting and drying of yellowtail (*Trachurus mccullochi* Nichols) *S. Berhimpon, R. A. Souness, K. A. Buckle & R. A. Edwards*

420 Colour loss during extrusion cooking of β-carotene–wheat flour mixes as an indicator of the intensity of thermal and oxidative processing *R. Guzman-Tello & J. C. Cheftel*

435 Desorption isotherms of shelled maize: whole, dehulled and hulls *M. P. Tolaba & C. Suarez*

442 Thermal treatment of aseptically processed tomato paste *C. G. Mallidis, P. Frantzeskakis, G. Balatsouras & C. Katsaboxakis*

449 The influence of fruit anatomy on ease of peeling of tomatoes for canning *W. P. Mohr*

458 A low-cost manual dehuller for soybeans *J. Singh & L. K. Sinha*

461 Effect of cooking method on water absorption and ease of dehulling in preparation of African locust beans for Iru *O. B. Oyewole & S. A. Odunfa*

464 Water activity of culture media used in food microbiology *M. A. Esteban, M. Alcala, A. Marcos, J. Fernandez-Salguero, G. D. Garcia de Fernando, J. A. Ordoñez & B. Sanz*

469 Book reviews

Volume 25 Number 5 October 1990

477 Effect of slaughter method on the progress of rigor of rainbow trout (*Salmo gairdneri*) as measured by an image processing system *K. Azam, N. J. C. Strachan, I. M. Mackie, J. Smith & P. Nesvadba*

483 Factors influencing the particle size distribution of flaked meat. I. Effect of temperature, aperture size and pre-breaking before flaking *P. R. Sheard, P. D. Jolley, R. K. Mounsdon & L. D. Hall*

506 Effect of length and temperature of storage on the ESR signal from various bones in irradiated chicken carcasses *R. Gray & M. H. Stevenson*

512 Co-operative trial of methods of analysis to detect irradiation treatment of chicken samples: initial trial *S. L. Scotter, P. Holley & R. Wood*

519 Fibre-optic spectrophotometry for predicting lipid content, pH and processing loss of comminuted meat slurry *H. J. Swatland & S. Barbut*

527 Preparation of transparent pea protein gels: a comparison of isolation procedures *J. R. Bacon, T. R. Noel & N. Lambert*

538 Effective of component configuration and packaging materials on microwave reheating a frozen three-component meal *J. R. Bows & P. S. Richardson*

551 Response of American consumers to akara, a traditional West African food made from cowpea paste *K. H. McWatters, A. V. A. Resurreccion & S. M. Fletcher*

558 Influence of precooking on firmness and pectic substances of three stem vegetables *A. Wu & W. H. Chang*

566 Extraction of ginger rhizome: partition constants and other equilibrium properties in organic solvents and in supercritical carbon dioxide *M. Spiro & M. Kandiah*

576 Mass transfer during osmotic dehydration of pineapple rings *C. I. Bertistain, E. Azuara, R. Cortés & H. S. Garcia*

583 Portable, low-cost equipment for small-scale fruit juice processing *P. G. Crandall, J. K. Upadhyaya & K. C. Davis*

590 An enzyme immunoassay for nisin *M. B. Falahee, M. R. Adams, J. W. Dale & B. A. Morris*

Short Communication

596 Effects of pectolytic enzyme treatments on anthocyanins in raspberry juice *J. Jiang, A. Paterson & J. R. Piggott*

601 Letter to the Editor

602 Book reviews

Volume 25 Number 6 December 1990

613 Review: Factors involved in the discoloration of beef meat *M. Renerre*

631 Colour stability of thawed lamb chops. I. Effect of short-term frozen storage *V. J. Moore*

637 Colour stability of thawed lamb chops. II. Chops from loins frozen for long periods *V. J. Moore*

643 Influence of sodium chloride and sodium tripolyphosphate on the quality of UK-style grillsteaks: relationship to freezing point depression *P. R. Sheard, P. D. Jolley, A. M. A. Katib, J. M. Robinson & M. J. Morley*

657 Effect of cooking and cooling method on the processing times, mass losses and bacterial condition of large meat joints *D. Burfoot, K. P. Self, W. R. Hudson, T. J. Wilkins & S. J. James*

668 Modelling the cooling phase of heat sterilization processes, using heat transfer coefficients *G. S. Tucker & P. Clark*

682 Co-trial on ESR identification and estimates of γ-ray and electron absorbed doses given to meat and bones *M. F. Desrosiers, W. L. McLaughlin, L. A. Sheahen, N. J. F. Dodd, J. S. Lea, J. C. Evans, C. C. Rowlands, J. J. Raffi & J.-P. L. Agnel*

692 Evaluation of force deformation data as indices to hydrocolloid gel strength and perceived texture *A. Nussinovitch, I. J. Kopelman & S. Mizrahi*

699 Contextual evaluation of canned lagers using repertory grid method *N. Gains & D. M. H. Thomson*

706 Formulation and shelf-life of a bottled pawpaw juice beverage *E. C. Okoli & L. O. Ezenweke*

711 Cocoa butter substitutes from sal (*Shorea robusta*) fat *S. Yella Reddy & J. V. Prabhakar*

718 Study on the influence of freezing rate on lipid oxidation in fish (salmon) and chicken breast muscles *M. C. Tomás & M. C. Añón*

722 Letter to the Editor

723 Author Index

726 Subject Index

736 Book Review Index